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U. S. DEPARTMENT OF HEALTH. EDUCATION. AND WELFARE

May 14, 1968 Vol. XX, No. 10 NATIONAL INSTITUTES OF HEALTH PUBLIC HEALTH SERVICE

To Begin This Month; All-Out Support Urged

The 1968 Savings Bond Drive will begin this month, and it is anticipated that NIH employees will go all out in support of this campaign so vital to the Nation's

All employees will be visited by an Institute or Division representative who will give them an opportunity to start a regular Savings Bond plan through payroll deductions or to increase present deductions.

Elson Cites Need

Sol Elson, Chairman of the DHEW Bond Drive Campaign, speaking at a pre-drive rally held April 26 in the Departmental auditorium, pointed up the need for participating in the drive.

"I do not have to tell you the major problems of our country today," Mr. Elson said, "as they are being constantly presented and discussed by experts.

"However, I can tell you how each of us can actively participate solving one of the major problems; namely, preserving the strength of the dollar by loaning Government our money (See BOND DRIVE, Page 4)

NIH Savings Bond Drive Pregnant Mothers' Health and Nutrition Can Influence IQ of Offspring in Future



This group of mothers and their children, awaiting their turn to be examined, are part of NINDB's long-term Collaborative Perinatal Project.

A mother's health and nutrition during pregnancy are factors that can influence the future intelligence of her child.

In one recent study, mothers with poorly controlled diabetes with

acetonuria (acetone bodies in urine) during pregnancy had children with lower I. Q.'s (on the Stanford-Binet scale) than children born to mothers in a control group.

In such cases, the mother's body uses protein, rather than carbohydrates, for fuel and the fetus may receive insufficient protein.

These and other findings were reported to the press at a DHEW press briefing on April 29. Dr. Richard L. Masland, Director, National Institute of Neurological Diseases and Blindness, and Drs. Heinz Berendes and John Churchill of the Institute's Collaborative Perinatal Project reported recent findings of the 10-year ongoing mother-child study.

Disability Origin Noted

Dr. Masland told science writers that most neurological disabilities have their origin during pregnancy and shortly after birth.

Collaborative Perinatal The Project was established to determine the causative factors of many of these disabilities by careful observation and recording of all incidents of pregnancy and by fol-(Continued on Page 5)

Secretary Cohen Confirmed

As this issue of the Record went to press, the Senate confirmed the nomination of Wilbur J. Cohen as Secretary of Health, Education, and Welfare.

Drs. Berliner and Habel Honored by Election to NAS

Dr. Robert W. Berliner, director of Intramural Research for the National Heart Institute, and Dr. Karl Habel, who retired from the National Institute of Allergy and Infectious Diseases last October, were recently honored by election to the National Academy of Sci-

Dr. Berliner, a noted renal physiologist and recipient of many awards and honors, is particularly known for his findings on the excretion and reabsorption of potassium which have added to the understanding of how water and electrolytes are handled by the kidney.

Currently, in addition to his role in planning research programs for the Institute, Dr. Berliner and his associates are studying sodium reabsorption in the proximal tubule of the dog, using a micropuncture technique that makes it possible to remove repeated samples of fluid



Dr. Robert W. Berliner is noted for his research on excretion and reabsorption of potassium.

from the same proximal tubule.

These studies include investigation of the effects of saline infusion, diuretic agents, and other factors on sodium reabsorption in the proximal tubule of the kidney.

Dr. Berliner has held several honorary positions including president of three organizations: the American Physiological Society,

(See ELECTION, Page 6)

Medical-Legal Aspects of Procurement Of Human Tissue for Research Reviewed

The medical-legal aspects of the procurement and use of human tissue for research and therapy were presented recently at an Extramural Forum and at the NIH Seminar on Science and Public Policy held at Airlie House.

The Extramural Forum was established under the sponsorship of the Committee on Staff Training-Extramural Programs (STEP) to bring timely issues to the attention of extramural personnel and to provide an opportunity for open, candid discussion.

Stimulates Interest

The presentations by Dr. Alfred M. Sadler and Blair L. Sadler, National Institute of Arthritis and Metabolic Diseases, were designed to stimulate interest in problems involved in use of human tissue, and to inform concerned NIH staff on complexities of the subject.

Although the use of tissues and

organs for transplantation is a significant part of the problem, it is by no means the entire one.

The National Pituitary Agency, supported by contract NIAMD, procures about 70,000 cadaver pituitaries annually to provide growth hormone for research on hypopituitary dwarfism, and other conditions.

Similarly, the National Cancer Institute established a tissue procurement program in 1961 to obtain a variety of specimens for cancer research. In fact, every Institute here is involved in this effort to some degree.

(See HUMAN TISSUE, Page 7)

Record

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NEWS from **PERSONNEL**

UNION ELECTION RESULTS

An election to determine exclusive representation for NIH employees engaged in custodial laboring duties and related building services was held here April 26.

As a result, exclusive recognition will be granted to the Washington Area Metal Trades Council, AFL-CIO, as the representative of all non-supervisory employees performing custodial laboring duties in a "unit" composed of the:

Units Listed

Operations Section, Department of Environmental Sanitation Control, Clinical Center; Property Management and Transportation Section, Administrative Branch, CC; and Housekeeping Section, Office Services Branch, Office of Administrative Management.

Having exclusive recognition will entitle the Metal Trades Council to act for and to negotiate agreements covering all employees in the unit and to represent their interests without discrimination and without regard to employee organization membership.

NO OPEN SEASON IN 1968

The Civil Service Commission has announced that there will be no open season for the Federal Employees Health Benefits Program in 1968 and that benefits and subscription rates presently in effect

Last of Writing, Editing Courses Start June 3

"Effective Writing" and "Report Writing," the last in a series of NIH FY '68 writing programs, will begin June 3 and end June 21.

The courses are designed for personnel responsible for writing, reviewing, or editing NIH communications.

Discussions, classroom exercises, and homework assignments are part of the "Effective Writing"

"Report Writing" is geared to the biomedical science writer. However, the course is open to anyone involved in writing or editing.

Each program consists of 15 twohour meetings. Those employees interested in taking either program should discuss the matter with their supervisor or personnel office.

for the various plans are guaranteed through December 31, 1968.

The next open season is scheduled for the period November 10 through November 28, 1969. During this period, employees who are eligible for coverage under the health program but are not presently enrolled, will again have the opportunity to register for enroll-

In addition, the open season will provide employees now covered by the program with an opportunity to make desired changes in their enrollment, including changes from one plan or option to another, changes in type of enrollment such as from self only to self and familv, or any such combination.

Pauline Utz Honored on 15th Anniversary As an NIH Red Cross Hospital Volunteer



All eyes are on Pauline Utz (left) as she prepares to partake of the obviously delicious refreshments at the party honoring her 15 years as an NIH Red Cross Hospital Volunteer. Beside her are Dr. David M. Fried, chief of the CC Rehabilitation Department, and Judith Schreiber, an occupational therapist.-Photos by Tom Joy.

A Clinical Center lunchtime party recently marked the 15th anniversary of Pauline Utz as an NIH Red Cross Hospital Volunteer. The event, attended by about 40 of Mrs. Utz's coworkers, friends, and CC

staff members, also commemorated the 15th year of Red Cross Hospital Volunteer service at the Clinical Center.

Shortly before the Clinical Center opened in 1953, Mrs. Uutz came here with a small group of "Gray Ladies," as Hospital Volunteers were then called, to "see where volunteers might work in this hos-

Latest Participants in **NIH Visiting Scientists Program Listed Here**

4/15—Dr. Vincent Zigas, Australia, Collabrative and Field Research. Sponsor: Dr. D. Carleton Gajdusek, NINDB, Bldg. 8, Rm.

4/25—Dr. Kazuyoshi Ikeda, Japan, Section on Organic Chemistry. Sponsor: Dr. H. Todd Miles, NIAMD, Bldg. 2, Rm. 202.

4/29—Dr. Peter Winter, West Germany, Laboratory of Neurophysiology. Sponsor: Dr. Karl Frank,

NINDB, Bldg. 10, Rm. 10D18. 4/29—Dr. Taijiro Matsushima, Japan, Carcinogenesis Biology Branch. Sponsor: Dr. John H. Weisburger, NCI, Auburn Bldg., Rm. 204.

AREA ELECTIONS SCHEDULED

Today, May 14, Maryland residents will have an opportunity to vote in the referendum on the proposed new Maryland Constitution, and on June 11 residents of Fairfax City, Va., will vote in the elec-tion of a Mayor and six City Council Members.

Maryland polls will be open between 7 a.m. and 8 p.m. and, in Fairfax City, the polls will be open from 6 a.m. to 7 p.m.

Where the polls are not open at least 3 hours before or after an

Program Established

They promptly established a Clinical Center volunteer program, and Mrs. Utz liked NIH and the Center so well that she has stayed

Her special interest is occupational therapy. She further specializes in working with patients who cannot go to the 4th floor occupational therapy area, but are confined to their own nursing units,

The projects selected for such patients to work on must be portable and easy to manipulate. Mrs. Utz also gives bedridden patients special assistance in techniques which enable them to make some rather difficult articles.

Friday mornings find Mrs. Utz (See MRS. UTZ, Page 7)

employee's regular work hours, he may be given enough excused leave to permit him to report for work 3 hours after the polls open or leave work 3 hours before the polls close, whichever requires less time.

A Good Buy: U.S. Savings Bonds

Executive Officer. NLM

George F. Russell, Jr., has been named executive officer of the National Library of Medicine.

Mr. Russell has been serving as acting executive officer since November 1967.

Before coming to the Library in 1966, as assistant executive officer, he completed a oneyear National Institute of Public Affairs fellowship at the University of Indiana.



Mr. Russell

Mr. Russell joined the Federal government in 1958 as a management intern with the Social Security Administration. He also served as a management analyst in the Office of the Director, NIH. from 1962 to 1966.

Degrees Noted

He graduated from the University of Buffalo in 1958 and received the M.P.A. in 1966 from the University of Indiana.

James G. Hill. NLM's financial management officer, succeeds to the post of assistant executive officer.

He began his career in 1963 as an NIH management intern, and then served as grants and contracts management officer in the National Cancer Institute.

NIH Annual Scientific **Directory-Bibliography Outlines Organization**

The NIH Scientific Directory 1968 and Annual Bibliography 1967, a reference book for research workers in the biomedical sciences, was issued recently.

An integral part of the volume is a synopsis of the NIH organizational structure. It lists the professional staff with their publications concerning research projects that they have worked on at NIH.

Other Data Included

The volume also includes research information undertaken by the National Institute of Mental Health at NIH. Directory and bibliography entries are grouped together under each Institute or Division heading.

In addition to the names of staff scientists and other vital personnel in the volume, visiting scientists and guest workers who have been with the NIH and NIMH for a year or more are also listed.

Copies of the directory may be obtained by calling Ext. 64143, or writing directly to the Superintendent of Documents, U.S. Government Printing Office, Wash., D.C. 20402. The price for each volume is 70 cents.

G. F. Russell Appointed NIH Fire Department Trains Employees Of DBS in Fire Emergency Procedures

Active participation in extinguishing controlled fires was an exciting aspect of a 2-hour course of instruction given recently by members of the NIH Fire Department to the employees of the Division of Biologics Standards.

Following a lecture and motion picture on fire prevention, emergency procedures, and fire extinguishing principles, the Fire Department gave an outdoor demonstration and drill in which DBS personnel played an energetic role.

Extinguishers Demonstrated

A principal aim of the course is to demonstrate to the employees the special applications of the two types of fire extinguishers in general use at NIH-CO2 (carbon dioxide) for flammable liquids and electrical fires, and water extinguishers for trash and similar combustible materials.

Included in this program are proper use of appropriate extinguishers and awareness of their location in case of an emergency.

A short time before DBS employees were instructed how to put out fires and the correct way to use the extinguishers, Donald Nusbaum, an NIH safety officer, conducted a fire drill in San Juan, Puerto Rico, at the Laboratory of Perinatal Physiology, National Institute of Neurological Diseases and Blindness.

Program Plans Made

Fire Chief Charles K. Keys hopes that eventually all employees of NIH will be reached in this ever-broadening program of fire prevention and safety.

At present plans are being formulated by Chief Keys and John B. Debnam, Jr., the inspector in charge of training in fire safety at NIH, to present the course dur-



John B. Debnam, Jr., NIH Fire Department instructor (left), is pictured with Dr. Jerome J. Helprin, chairman of the DBS Safety Committee.

ing the month of May to employees in Buildings 5, 7, 9, and 30.

In making these arrangements, the Fire Department works closely with the Safety Committees established in most Institutes and Divisions here. Much of the success of the DBS presentation was attributed to the excellent cooperation extended by Dr. Jerome J. Helprin, Chairman of the DBS Safety Committee.

Thus far instructions have been given by the Fire Department to: the National Library of Medicine, Clinical Center, Plant Engineering and Laboratory Aids Branches of DRS, Office Services Branch, Protection and Safety Management Branch, Supply Management Branch, and the Division of Computer Research and Technology.

(Continued on Page 8)



NIH firemen wait in front of Building 29-A to demonstrate use of fire extinguishers. Seated is Milton R. Mullican, assistant fire chief. Standing I to r are: George B. Williams II, Richard M. Goldstein, Charles O. Poole, and James A. Deater.—Photos by Donald Nusbaum.

NCI Journal Dedicates Issue to Dr. Andervont

The June issue of the Journal of the National Cancer Institute will be dedicated to its recently retired scientific editor, Dr. Howard B. Andervont; he had served in that post since 1961.

Dr. Andervont retired from NCI in March. He was a member of the research staff in the Laboratory of Biology. The scientist-editor had been there since its founding in 1937. (See NIH Record, March 5, 1968).

Mammary Cancer Is Subject

The issue dedicated to Dr. Andervont will contain 17 pages on mammary cancer-much of his research work was done in this subject.

Among the papers will be an article by Dr. Leon Dmochowski and associates, The University of Texas M.D. Anderson Hospital and Tumor Institute, on "Electron Microscope and Bioassay Studies of Milk from Mice of High and Low Mammary-Cancer and High and Low Leukemia Strains."

Other Research Published

Also published in this dedication issue will be a report by Drs. Albert J. Dalton and Michael Potter, NCI, on "Electron Microscopic Study of the Mammary Tumor Agent in Plasma Cell Tumors," and a paper by Drs. William F. Feller and Harish C. Chopra, the John L. Smith Memorial for Cancer Research, Chas. Pfizer & Co., on "A Small Virus-Like Particle Observed in Human Breast Cancer by Means of Electron Microscopy.'

The special issue includes a preface by Dr. Kenneth M. Endicott, Director of the National Cancer Institute, and an appreciation by Dr. Michael B. Shimkin of Temple University School of Medicine, former scientific editor of the Journal.

NLM Extends Its Exhibit On 'Drugs and History'

The National Library of Medicine has announced that the current lobby exhibit, "Drugs and History," will be extended to June 14.

Originally scheduled until May 28, the exhibit contains 19th and 20th century pharmacy supplies, live leeches of the kind used by early pharmacists to draw blood, early patent medicines, and advertisements from 19th century pharmaceutical journals.

A number of related manuscripts, rare books, and periodicals dating back to the 15th century also are featured.

The exhibit is open to the public during the Library's regular hours: 8:30 a.m. to 9 p.m., Monday through Friday; 8:30 a.m. to 5 p.m., Saturday; and 2 to 6 p.m.,

On-the-Job Training Program Succeeds In Producing Biological Aides at DEHS



Willie Link, a new biological aide at DEHS, is shown how to feed research animals by Phil Jones, an instructor. Other new aides are (from left) Louise Cates, William McGee, Mary Baines, and Pearl Johnson. Viola Holiday (lower right), an assistant supervisor in the Animal Sciences and Technology Branch, observes the demonstration. In the background, Dr. Cobert LeMunyan, branch chief, can be seen talking to an unidentified reporter. Biological aides not shown are Frank Harrington, Nancy Ann Mason, and James Self.

When the Division of Environmental Health Services moved to the Research Triangle Park in North Carolina less than a year ago, there were no trained animal caretakers in the Triangle area. Today, as a result of a special program, there

National Environmental Sciences Center performing increasingly difficult laboratory work.

This achievement represents a two-way success story. For DEHS, the biological aides represent trained employees essential to laboratory work.

are eight biological aides at the

Advancement Possible

For the eight employees, their jobs offer an opportunity to demonstrate their capabilities and to advance in their new-found careers as experience warrants.

Through the cooperative efforts of Operation Breakthrough's "New Careers" program and DEHS, a program of on-the-job training, in addition to formal classroom work and special counseling, was initiated.

Ten trainees started out in the program, initiated in July 1967. Eight completed the training and were appointed to fulltime positions on April 7. One of the eight is receiving additional training as a laboratory aide.

Trainees Adjust to Animals

At DEHS, the first step for the trainees was to learn to properly pick up animals, such as mice, rats, guinea pigs, rabbits, and opossums. This was a major first step, especially for some of the girls.

As they gained proficiency, they learned the scheduled feedings. Then they were assigned to a particular scientist working on a particular problem.

BHM Nursing Programs Analyzed at Meeting

The seventh annual meeting of the Bureau of Health Manpower's Division of Nursing was held recently. Headquarters, regional and field staffs discussed both present and potential nursing programs.

Regional and field representatives reported on local nursing and medical program activities.

Among the participating speakers were Dr. Leonard D. Fenninger, Director, BHM; Miss Jessie M. Scott, director, Division of Nursing; Dr. James A. Block, Office of Comprehensive Health Planning; and Dr. Margaret Sloan, associate director for Organizational Liaison, NIH.

The trainees then began working more closely with the scientists and doctors who supervised their training. Among the skills that they have gained are drawing blood, administering pregnancy tests, and assisting in other ways in biological research.

The Division of Environmental Health Sciences is one of five nonprofit agencies in the Research Triangle Park area involved in the "New Careers" program.

Working with a \$403,580 Federal grant which is matched with \$61,480 in non-Federal funds, "New Careers" provides 100 openings for persons to be trained to gain jobs with a future.

NINDB Research Report On Spinal Cord Injuries Discusses Rehabilitation

Between five and ten thousand new cases of spinal cord injury, with resulting paralysis, occur each year in the United States.

Automobile accidents are the leading cause of spinal cord injuries, but motorbike, football, and skiing accidents are increasingly frequent causes.

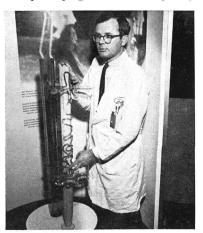
Skiing and motorbiking are drawing more young enthusiasts each year. Hence, there are many young victims of spinal cord injuries, and more than 75 percent are male.

Research Explained

A new publication, Spinal Cord Injury, Hope Through Research, has been recently issued by the National Institute of Neurological Diseases and Blindness. The booklet provides a better understanding of what research is doing to help those suffering from paralysis due to injuries of the spinal cord.

"Paraplegia," paralysis of the legs and lower part of the body, results because of an injury to the spinal cord at the lower back or chest level. "Quadriplegia" is paralysis of legs and arms when the spinal cord is injured at the neck level. Victims of paraplegia and quadriplegia face extensive and costly medical treatment and, of course, emotional readjustments.

The new booklet discusses many methods of rehabilitation now being used to encourage paraplegics and quadriplegics so that they may



Dr. John Doppman, assistant chief of the CC Diagnostic Radiology Department, shows a large-scale model for a new method of diagnosis and correction of a spinal cord aneurysm.— Photo by Wesley Pearson, Jr.

live productively with their handi-

The illustrated pamphlet is written for the general public. It explains the structure of the spinal cord and its bony protective covering, the vertebrae, and discusses

BOND DRIVE

(Continued from Page 1)

through purchases of Bonds and Freedom Shares.

"By doing so," Mr. Elson noted, "we will be enabling our Government to meet its borrowing needs outside of the overcrowded and costly money markets, thereby financing its debts in an anti-inflationary manner.

Invest for Future

"To participate in the payroll savings plan," he added, "is not only an excellent way to save and invest for your personal future or that of your children, but it is a rare privilege—not enjoyed by citizens of many countries."

The new "Freedom Shares" mentioned by Mr. Elson were introduced last year and will be available again. They can be purchased only in combination with regular Series E Bonds.

"Freedom Shares" are higherpaying U.S. Savings Notes that yield 4.74 percent interest when held to maturity, 4½ years. Details of the plan will be provided each employee during the drive.

Payroll Deductions Easiest

Many people do not miss a biweekly paycheck deduction—as little as \$1.25 for a \$25 Series E Bond, or \$3.75 for a Bond plus Freedom Share—but this provides a secure resource for future needs.

Dr. G. Donald Whedon, Director of the National Institute of Arthritis and Metabolic Diseases, has been appointed NIH Bond Drive chairman.

Frank Mills, assistant executive officer, NIAMD, is co-chairman and has announced that keymen will contact each NIH employee personally during the next few weeks.

the infections, diseases, and accidents which can damage the spinal

The pamphlet reviews first aid precautions essential in protecting accident victims suspected of having a spinal cord injury.

Research on ways of treating spinal cord injuries also is described in the booklet. For instance, the pamphlet explains how studies of fish and salamander, which regenerate a cut spinal cord, lend new insight into regenerative processes

This research, supported by NINDB and other research institutions, may eventually play a part in treating human spinal cord injuries.

The booklet (PHS Publication No. 1747) may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, for 20 cents.

A limited number are available without charge from the NINDB Information Office, Ext. 65751.

Major Influences in Pregnant Mothers' Health Assessed at NINDB Press Briefing



Last baby born in 1966 in Perinatal Project.



A 3-year-old girl is being tested for hearing.



Psychologist evaluates baby's response to image.

NIGMS Appoints Barnes To Training Committee

Dr. Richard H. Barnes, dean of the Graduate School of Nutrition, Cornell University, has been appointed to the Nutrition Science Training Committee of the National Institute of General Medical Sciences.

Since 1959 Dr. Barnes has been editor of the Journal of Nutrition.

In 1967 he received the Borden Award in Nutrition.

TV Film May 24 Features Research Activities at NIH

A special television show, "Future of Medicine," narrated by Frank McGee on NBC-TV Channel 4 at 10 p.m. on May 24, will feature research activities at NIH.

'The Search,' NCI Film, Nominated for Award

"The Search," a half-hour film sponsored by the National Cancer Institute and produced by National Educational Television (NET) has been nominated for a documentary film award in the 1968 American Film Festival.

Members of the American Film Society will vote on this and other films. Results will be announced on May 31 at the New York Hilton.

The film is Part I of NCI's 2-part film program called "Drugs Against Cancer." It describes ways in which research scientists identify and develop materials with anticancer potential, test them in animals, evaluate, and in some cases, improve their usefulness against human cancer.

Filmed in color, it is being telecast by 133 stations of NET's nationwide network as part of its "Spectrum" science series.

(Continued from Page 3)

low-up testing of the children to age 7.

Nearly 60,000 mothers were enrolled in the project at 14 medical institutions throughout the U. S.

A major aim of the project is to reassess the importance of conditions during pregnancy suspected of influencing the development of neurological defects.

This reassessment required the development and validation of tests for the early recognition of neurological abnormalities.

Understanding Increases

A number of conditions are now better understood. Prematurity, for example, by gestation and low birth weight, has been associated with many neurological disorders.

Children with spastic diplegia, a form of cerebral palsy, as a group tend to have a short gestation and low birth weight.

After birth, infants with this syndrome tend to lose weight immediately and to lose red blood cells, an indication of bleeding somewhere in the body—perhaps in the brain.

Children later diagnosed as be-

ing mentally retarded, on the other hand, often are not premature by gestation but are smaller at birth ("small for date" babies).

Project scientists believe that three factors influence intelligence: genetic background of the child; maternal health during pregnancy; and socio-environmental factors. The relative importance of each of these is not yet known.

However, nutrition, especially sufficient protein intake, is thought to be an important factor in maternal and fetal health.

In studies of identical twins, the smaller twin at birth often has lower intelligence than his larger sibling.

This finding has led investigators to postulate that the smaller twin did not receive enough essential nutrients from his mother's already overtaxed supply.

Analyses Under Way

The obstetric phase of the project ended when the last baby was born in September 1966. Analyses of data from this phase is under way as the project enters the pediatric phase.



Science writers are briefed on NINDB's Collaborative Perinatal Project by (I to r): Dr. Heinz W. Berendes, Dr. Richard L. Masland, Institute Director, and Dr. John Churchill.—Photo by Tom Joy.

Instrument Symposium Exhibit at NIH in Fall

The 18th Annual Instrument Symposium and Research Equipment Exhibit will be held at NIH during the second week of October.

The Symposium on "Recent Developments in Research Methods and Instrumentation," will run from October 7-11. The Research Equipment Exhibit will be here from October 7-10.

Dr. Alan J. Sheppard, Food and Drug Administration, is chairman of the Symposium. James B. Davis, chief of the Supply Management Branch, NIH, is executive secretary; he is also serving as exhibit manager of the Research Equipment Exhibit. Dr. Robert Bowman, National Heart Institute, is chairman of the Exhibit.

Topics to be discussed at the Symposium include: Chemical Probes of Protein Structure; Sequence and Synthesis of Polypeptides; Fast Reactions in Solution-Flow Methods; Fast Methods in Solution-Relaxation; Cellular Surface Chemistry; Differential Calorimetry and Thermal Analysis; Recent Advances in Electron Microscopy; Ion Specific Electrodes, and Heterogenus Interactions.

Dr. Herman Addresses Society for Microbiology

Dr. Lloyd G. Herman, Division of Research Sciences, addressed the 68th Annual Meeting of the American Society for Microbiology, in Detroit, recently. Dr. Herman is chief of the Laboratory Section, Environmental Services Branch.

His subject, "Surveillance and

Control of the Microorganisms of the Environment," explained the ways in which modern microbiological techniques are being applied to environmental contamination.

ELECTION

(Continued from Page 1)

the American Society for Clinical Investigation, and the Third International Congress of Nephrology. He is now president-elect of the American Society of Nephrology.

Last year Dr. Berliner was a Bicentennial Medalist of the College of Physicians and Surgeons of Columbia University. Earlier he received the alumni award for distinguished achievement and the Homer W. Smith Award in renal physiology among other honors.

Dr. Berliner came to the Heart Institute as chief, Laboratory of Kidney and Electrolyte Metabolism, in 1950 and assumed his present position in 1954.

Prior to coming to NIH, Dr. Berliner led a research group at Columbia University, where he was assistant professor of medicine.

The other new member of the National Academy of Sciences, Dr. Habel, was chief of NIAID's Laboratory of Viruses from 1959 until his retirement.

Since retiring after a 30-year PHS career, Dr. Habel has contin-



Dr. Karl Habel, retired NIAID laboratory chief, is continuing his virology research at La Jolla, Calif.

ued his research at the Scripps Clinic and Research Foundation, La Jolla, Calif.

In recent years Dr. Habel has concentrated on the role of viruses, particularly polyoma virus, in producing tumors in experimental animals. His investigations have demonstrated the importance of the host's immunological response in determining the development or rejection of virus-induced tumors.

He also is one of the world's foremost authorities on rabies. He participated in the development of the first mumps vaccine, and his achievements in basic research helped bring poliomyelitis under

In 1966 Dr. Habel received the PHS Distinguished Service Medal in recognition of the excellence of his achievements in virology. That same year he delivered the 15th annual Dyer Lecture here.

Clinical Nursing Conference Discusses Dr. Domanski Appointed Research on Wiskott-Aldrich Syndrome



Participants in a Clinical Nursing Conference on Wiskott-Aldrich syndrome are (I to r): Lawrence Burke, CC Social Worker; Martha Gayle Wood and Mary Sue Miles, Clinical Nurses; Dr. Thomas Waldmann, NCI; and Cynthia Zealy, CC Pediatric Head Nurse.—Photo by Ralph Fernandez.

Members of an NIH clinical research team studying Wiskott-Aldrich syndrome discussed some of their findings at a Clinical Nursing Conference held recently in the Clinical Center auditorium.

Catalog of Tissue Typing Antisera by NIAID Now **Available to Researchers**

A new Catalog of Tissue Typing Antisera was recently made available to qualified investigators in the field of organ transplanta-

The catalog was compiled by the Transplantation Immunology Branch of the Collaborative Research Program in the National Institute of Allergy and Infectious Diseases.

The catalog provides specifications for the individual sera available from the NIAID sera banks as well as current information on conferences and workships being held by the world's leading immunologists. The sera are classified as monovalent or polyvalent.

A laboratory manual accompanies the catalog and contains the most recent modifications in techniques as described by the leaders in histocompatibility typing.

About 150 copies of the catalog and manual have been distributed, primarily to investigators active in clinical transplantation.

6 Join 'Gallon Donor Club'

The Clinical Center Blood Bank has announced that six NIH staff members have joined the "Gallon Donor Club." They are:

Dr. Thomas P. Cameron, NCI; Joseph G. Evrard, DRS; Lorraine F. Mahin, DRG; Gerald Meyer, NCI; Kenneth Mitchell, OD; and Dr. James R. Weisiger, NIAMD.

Wiskott-Aldrich syndrome, usually fatal inherited childhood disease, occurs only in males. Low resistance to infection and bleeding are its leading causes of death.

Investigators studying this rare disease believe that understanding it may lead to more knowledge of similar common diseases, such as leukemia.

Participants included nurses from the Cancer Nursing Services' Pediatric Nursing Unit, Dr. Thomas Waldmann, senior investigator in the Metabolism Branch of the National Cancer Institute, and Lawrence Burke, clinical social worker.

Dr. Waldmann discussed current NCI studies on the syndrome and Mr. Burke explained the social and emotional problems caused by the disease.

Act as Parent-Substitutes

Cynthia Zealy, Pediatric Unit head nurse, presided over the conference. She explained that, besides attending to the physical needs of children with Wiskott-Aldrich syndrome, nurses often serve as parent-substitutes, teaching long-term patients to walk, talk, and interact with others.

An important and difficult part of the nursing care of these patients is preventing exposure to sources of infection and childhood injuries which might cause bleeding, clinical nurse Martha Gayle Wood told the audience. When injuries or infections do prompt treatment is essential.

Nurses attempt to make childhood development as normal as possible for Wiskott-Aldrich patients, Mary Sue Miles, clinical nurse, explained. This includes teaching them such basics as how to wash their own hands.

Chief of NCI Branch

The appointment of Dr. Thaddeus J. Domanski as chief of the Awards, Review and Technical Administration Branch has been announced by Dr. J. Palmer Saunders, associate director for Extramural Activities, National Cancer Institute.

Dr. Domanski will also continue to serve as program director for Chemical Carcinogenesis in Extramural Activities.

In this latter position, Dr. Domanski has been directing a program to study the action and physiological disposition of chemical carcinogens (see NIH Record, October 3, 1967).

Activities Noted

Dr. Domanski is a retired colonel in the Biomedical Sciences Corps, U.S. Air Force. He is a fellow of the American Academy of Forensic Sciences, a former member of the Inter-Agency Committee on Laboratory Medicine, a member of the Committee on Alcohol and Drugs of the National Safety Council, an associate member of the American Society of Clinical Pathologists, and a member of Phi Beta Kappa and Sigma Xi.

He also was liaison representative, Committee on Toxicology, National Academy of Sciences, National Research Council, and holds membership in the Aerospace Medical Association and senior membership in the Instrument Society of America.

Former DRG Employee, F. H. Jackson, Retires

Frances H. Jackson, Special Assistant (Inventions) in the Inventions Office of the Assistant Secretary for Health and Scientific Affairs, DHEW, is retiring after 20 years of intermit-

tent Federal service.

Mrs. Jackson be-



Mrs. Jackson

gan her Federal career in 1928, working in various government departments and agencies until she resigned to rear her family. She re-

turned to Federal service in 1958, joining the National Cancer Institute at the Clinical Center as an administrative assistant.

After 2 years with NCI, Mrs. Jackson came to the Division of Research Grants as a fellowship assistant in the Fellowship Branch, now the Career Development Review Branch. Mrs. Jackson then served as a grants assistant with the Neurology A Study Section.

In 1963 she transferred to the Inventions Office which at that time was within DRG but later placed under DHEW.

HUMAN TISSUE

(Continued from Page 1)

Mr. Sadler reviewed state and Federal laws relevant to the procurement of human tissue. The taking of tissue from a living donor requires his voluntary and informed consent.

Under common law, however, removal of cadaveric tissue requires the consent of the appropriate next-of-kin who traditionally has had the right to control the disposition of the deceased. The corollary to this is that a person has no "property rights" in his body and thus cannot donate tissue for medical research.

Consequently, Mr. Sadler said, the need has arisen for state laws which specifically authorize donations before death. Although donation statutes now exist in 41 states (including D. C. and Puerto Rico), most are inadequate.

Model Law Drafted

This need has prompted the Commissioners on Uniform State Laws to draft a tentative Uniform Anatomical Gift Act. This Commission, composed of three lawyers or judges from each state, has compiled an outstanding record for securing enactment of model state laws.

It is expected, Mr. Sadler stated, that the draft will become final at the Commission's national conference in July. It should also receive the endorsement of the American Bar Association and the American Medical Association.

Mr. Sadler noted that the current legal climate throughout the country is very favorable and indicated that the Uniform Act would probably be enacted in the majority of states.

Based on the latest draft of the Uniform Anatomical Gift Act, the state of Maryland recently revised

Tyrosine Hydroxylase Activity Reduced in Experimental Congestive Heart Failure

A team of National Heart Institute scientists has found that tyrosine hydroxylase activity is reduced in experimental congestive heart failure. From the known role of this enzyme in norepinephrine (NE) synthesis,

the scientists infer that NE production is impaired in the failing heart.

These findings were reported recently by Drs. P. E. Pool, J. W. Covell, M. Levitt, J. Gibb, and E. Braunwald of the Institute's Cardiology Branch and Laboratory of Clinical Biochemistry.

Norepinephrine is a neurohormone produced, stored and released at sympathetic nerve terminals where it functions as a chemical messenger to bridge the gaps between these nerve terminals and the target organs of nerve impulses.

its donation statute. The revision passed both Houses of the Legislature in March of this year and represents the most comprehensive donation statute in the country, according to Mr. Sadler.

The ramifications of the increasing involvement of commercial companies in tissue procurement and possible need for regulation and licensing of tissue banks to insure necessary quality, were also discussed.

Medical-Legal Team

Dr. Sadler, a physician, and Mr. Sadler, a lawyer, have been examining medical-legal matters that relate to NIH. Since last July they have been working in the Office of Program Planning, NIH.

Recently they moved to the Office of the Director, NIAMD, where they continue to be concerned with NIH-supported activities requiring use of human tissue and with legal structure which permits such activities.



NIH Director Dr. James A. Shannon (right) receives a preliminary report on a "National Program for Dermatology" from Dr. Rudolf L. Baer, New York University, chairman of the Joint Committee on Planning for Dermatology, established by the American Academy of Dermatology, Inc. The report sets forth the present status of dermatology with respect to patient service, education, and research, and makes proposals for future goals and objectives.—Photo by Ralph Fernandez.

Norepinephrine synthesis follows the formation of a series of precursor compounds, each catalyzed by a different enzyme.

Tyrosine hydroxylase is the enzyme that catalyzes the first step in NE synthesis, the transformation of tyrosine to DOPA.

Recent NHI studies had also characterized this conversion as the slowest, or rate-limiting step that ultimately determines the rate of NE production in the heart and other tissues.

Depletion of heart NE stores, a known feature of congestive heart failure, has been attributed to the increased release of NE that occurs when increased sympathetic nerve impulse traffic attempts to "flog" the overburdened heart into meeting its circulatory obligations. Not known was whether impaired NE synthesis also contributed to NE depletion in the failing heart.

Reduced Activity Shown

The investigators reasoned that, since the tyrosine to DOPA conversion is the rate-limiting step in NE production, demonstration of reduced tyrosine hydroxylase activity in the failing heart would implicate inadequate NE synthesis.

Accordingly, they placed radioactive tyrosine in extracts of normal and experimentally failing dog hearts, and used the amount of radioactive DOPA produced as an index of tyrosine hydroxylase activity in the preparations.

Their studies showed that the amount of radioactive DOPA formed by extracts from failing hearts was very small compared to that formed by normal hearts, indicating reduced tyrosine hydroxylase activity and a very slow rate of NE synthesis in the failing heart.

Drs. Abdellah, Roberts To Advise Commission

Drs. Faye G. Abdellah and Doris E. Roberts, of the Division of Nursing, Bureau of Health Manpower, have been appointed to a team of five research consultants who will advise the National Commission for the Study of Nursing and Nursing Education.

W. A. Wallis, president of the University of Rochester, is head of the 15-member Commission.

Drs. Abdellah and Roberts will serve as consultants on subjects recommended by the Surgeon General's Consultant Group on Nursing.

The subjects include economic and other factors which affect

MRS. UTZ
(Continued from Page 2)



Here Mrs. Utz prepares a key case to be finished by a bedridden patient.

at her 4th floor workbench preparing key cases, winding yarn, and readying small hand looms which she will, under orders from the professional occupational therapy staff, take to bedridden patients that afternoon.

For 15 years prior to joining the NIH team, Mrs. Utz worked at Walter Reed, Naval Medical, and suburban hospitals as a Red Cross volunteer—making her Montgomery County's Hospital Volunteer with the most years of service.

Mrs. Utz has continued her work at NIH, she said, because the volunteers in occupational therapy here have an opportunity to work closely with the hospital professional staff.

Moreover, patients often stay at



At workbench, Mrs. Utz operates a hand loom used by patients confined to their beds or nursing units.

the Clinical Center longer than in other hospitals, she added, thereby providing volunteers with an opportunity to work over an extended period of time with each patient, and becoming important to them as a link with home life in the community.

nursing recruitment, the expanding area of nursing as a profession, and the educational routes for entering the profession.

NIH Fire Department Instructs DBS Employees in Use of Fire Extinguishers

(Continued from Page 3)

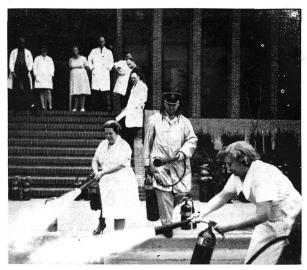


A large fire can be approached with an extinguisher.

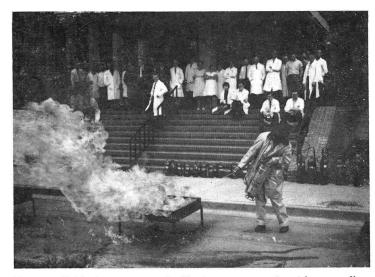
Photos by Donald Nusbaum



After returning extinguishers, DBS employees discuss fire safety.



Women are able to easily handle fire extinguishers.





Fireman (left) demonstrates ineffective water extinguisher on flammable material compared to carbon dioxide in extinguisher at right.





CO2 is helpful in simple trash fire at left, but water extinguishers (right) are demonstrated to be better in quenching this type of fire.